WHAT IS CLAIMED IS:

1. A region data describing method for describing, over a plurality of frames, region data about a region of an arbitrary object existing in a video, the region data describing method comprising:

extracting position data of a representative point of an approximate figure approximating the region or a characteristic point of the region from the plurality of frames;

determining a function approximating a trajectory which links corresponding representative points or corresponding characteristic points of successive frames, the function being represented by a parameter; and

describing the parameter of the function as the region data.

2. The region data describing method according to claim 1, further comprising describing information specifying a leading frame or a trailing frame of said plurality of frames as the region data.

3. The region data describing method according to claim 2, further comprising describing information of the type of the approximate figure as the region data.

4. The region data describing method according to claim 2, further comprising describing information of the number of the approximate figure as the region data.

5. The region data describing method according to claim 1, wherein the parameter includes position data of knots of the trajectory and information specifying the trajectory used together with position data of the knots of the trajectory.

6. The region data describing method according to claim 1, wherein

a plurality of the representative points or the characteristic points are included in a certain frame, and

the region data includes information specifying correspondence among a plurality of said representative points or characteristic points in the certain frame and a plurality of said representative points or characteristic points in an adjacent frame.

7. The region data describing method according to claim 1, further comprising describing related information related to the object or information indicating a method of accessing to the related information.

8. A region data generating apparatus for generating region data about a region of an arbitrary object existing in a plurality of frames of a video, the region data generating apparatus comprising:

an extracting circuit configured to extract position data of a representative point of an approximate figure approximating the region or a

characteristic point of the region from the plurality
of frames;

a function determining circuit configured to
determine a function approximating a trajectory which
5   links corresponding representative points or
corresponding characteristic points of successive
frames, the function being represented by a parameter;
and

a describing circuit configured to describe the
10   parameter of the function as the region data.

9.   The region data generating apparatus according
to claim 8, wherein said describing circuit describes
information specifying a leading frame or a trailing
frame of said plurality of frames.

15   10.   The region data generating apparatus according
to claim 9, wherein said describing circuit describes
information of the type of the approximate figure.

11.   The region data generating apparatus according
to claim 9, wherein said describing circuit describes
20   information of the number of the approximate figure.

12.   The region data generating apparatus according
to claim 8, wherein the parameter includes position
data of knots of the trajectory and information
specifying the trajectory and used together with
25   position data of the knots of the trajectory.

13.   The region data generating apparatus according
to claim 8, wherein

a plurality of the representative points or the characteristic points are included in a certain frame, and

the region data includes information specifying correspondence among a plurality of said representative points or characteristic points in the certain frame and a plurality of said representative points or characteristic points in an adjacent frame.

14. The region data generating apparatus according to claim 8, wherein said describing circuit describes related information related to the object or information indicating a method of accessing to the related information.

15. A storing medium storing a computer program for describing, over a plurality of frames, region data about a region of an arbitrary object existing in a video, the computer program comprising:

a first program code of extracting position data of a representative point of an approximate figure approximating the region or a characteristic point of the region from the plurality of frames;

a second program code of determining a function approximating a trajectory which links corresponding representative points or corresponding characteristic points of successive frames, the function being represented by a parameter; and

a third program code of describing the parameter

of the function.

16. The storing medium according to claim 15, wherein said third program code describes information specifying a leading frame or a trailing frame of said plurality of frames.

17. The storing medium according to claim 16, wherein said third program code describes information of the type of the approximate figure.

18. The storing medium according to claim 16, wherein said third program code describes information of the number of the approximate figure.

19. The storing medium according to claim 15, wherein the parameter is position data of knots of the trajectory and information specifying the trajectory and used together with position data of the knots of the trajectory.

20. The storing medium according to claim 15, wherein

a plurality of the representative points or the characteristic points are included in a certain frame, and

said third program code describes information specifying correspondence among a plurality of said representative points or characteristic points in the certain frame and a plurality of said representative points or characteristic points in an adjacent frame.

21. The storing medium according to claim 15,

wherein said third program code describes related information related to the object or information indicating a method of accessing to the related information.

5   22.   The storing medium according to claim 15, wherein the region data comprises identification information of the object, information specifying a leading frame and a trailing frame of said plurality of frames, information related to the object, information

10   indicating a method of accessing to the related information, information of the number of the approximate figure, and approximate figure information which includes information of the type of the approximate figure, number information of the

15   representative point, and function data of a spline function approximating the trajectories of the representative point which includes knot information, order information of the spline function, and coefficient information of the spline function.

20   23.   The storing medium according to claim 15, wherein the region data comprises identification information of the object, information specifying a leading frame and a trailing frame of said plurality of frames, related information related to the object,

25   information indicating a method of accessing to the related information, and characteristic point information which includes information of the number of

the characteristic point and function data of a spline

function approximating the trajectories of the

characteristic point which includes knot information,

order information of the spline function, and

5   coefficient information of the spline function.